

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An optical writing unit, comprising:

a light emitting device array comprising a plurality of light emitting device array chips, each of the light ~~entity~~ emitting device array chips comprising a plurality of light emitting devices that are arranged at a predetermined interval P; and

an image forming device array comprising a plurality of image forming devices, wherein light volume of the light emitting devices is set up such that a predefined property value concerning an exposure intensity distribution of each of the light emitting devices falls within a predetermined range, the predetermined range being defined for an effective image area in its entirety, and

the light volume of the light emitting devices that are located on and near an edge of the light emitting device array chip can be set differently from other light emitting devices.

Claim 2 (Original): The optical writing unit as claimed in claim 1, further comprising operating process means for setting up the light volume for each of the light emitting devices to irradiate, wherein each of the light emitting devices is driven based on the light volume set up by the operating process means.

Claim 3 (Original): The optical writing unit as claimed in claim 2, wherein the operating process means are arranged for acquiring a correlation between the light volume and the property value for each of the light emitting devices, based on a result of measuring the property value corresponding to the light volume.

Claim 4 (Previously Presented): The optical writing unit as claimed in claim 2, wherein the operating process means are arranged for acquiring the range of the property value that the light emitting device takes, based on the property values of a plurality of the preceding light emitting devices.

Claim 5 (Original): The optical writing unit as claimed in claim 2, wherein the operating process means are arranged for determining the light volume of each of the light emitting devices using a compensation value for a driving current.

Claim 6 (Canceled).

Claim 7 (Currently Amended): The optical writing unit as claimed in claim 1, wherein the light volume of the light emitting devices that are located on and near the edge of the light emitting device array chips is set ~~up such that~~ when an interval P_a between one of the light emitting devices on the edge of one of the light emitting device array chips and another one of the light emitting devices on the edge of an adjacent one of the light emitting device array chips is different from the predetermined interval P and such that $P_a > 1.1P$ or $P_a < 0.9P$.

Claim 8 (Original): The optical writing unit as claimed in claim 1, wherein the property values of more than $M/2$ of the light emitting devices that are located on and near the edge of each of the light emitting device array chips are measured, when the property values of a total of M of the light emitting devices are measured.

Claim 9 (Previously Presented): An image forming apparatus for forming an image, comprising:

an exposure unit comprising an image forming device array and a light emitting device array, the light emitting device array comprising a plurality of light emitting device array chips, each light emitting device array chip comprising a plurality of light emitting devices,

wherein light volume of the light emitting devices is set up such that a predefined property value concerning an exposure intensity distribution of each of the light emitting devices, which correspond to an effective image area in its entirety, falls within a predetermined range, and

the light volume of the light emitting devices that are located on and near an edge of the light emitting device array chip can be set differently from the other light emitting devices.

Claim 10 (Previously Presented): A driving method of an optical writing unit comprising an image forming device array and a light emitting device array, the light emitting device array comprising a plurality of light emitting device array chips, each of the light emitting device array chips comprising a plurality of light emitting devices, the image forming device array comprising a plurality of image forming devices, the driving method comprising:

setting light volume of the light emitting devices such that a predefined property value concerning an exposure intensity distribution of each of the light emitting devices, which correspond to an effective image area in its entirety, falls within a predetermined range,

wherein the light volume of the light emitting devices located on and near an edge of the light emitting device array chip are set near an upper limit or a lower unit of the predetermined range.

Claim 11 (Previously Presented): An optical writing unit, comprising:

a light emitting device array comprising a plurality of light emitting device array chips, each of the light emitting device array chips comprising a plurality of light emitting devices that are arranged at a predetermined interval P; and

an image forming device array comprising a plurality of image forming devices,

wherein light volume of the light emitting devices is set such that a gradient of an approximated line for exposure areas corresponding to a plurality of the light emitting devices that are selected at a predefined cycle falls within a predetermined range, the predetermined range being defined for an effective image area in its entirety, and

the light volume of the light emitting devices that are located on and near an edge of the light emitting device array chips are set up such that said gradient corresponds to an interval P_a between the light emitting device on the edge of one of the light emitting device array chips and the light emitting device on the edge of an adjacent one of the light emitting device array chips.

Claim 12 (Original): The optical writing unit as claimed in claim 11, wherein the predefined cycle is a constant throughout the light emitting device array.

Claim 13 (Original): The optical writing unit as claimed in claim 12, wherein one cycle of the predefined constant cycle comprises $M+N$ of the light emitting devices, where M represents the number of the light emitting devices that are selected, N represents the number of the light emitting devices that are not selected, and

M is equal to or less than N.

Claim 14 (Previously Presented): The optical writing unit as claimed in claim 11, wherein the predetermined interval P of the light emitting devices is set equal to $1/10$ or less than $1/10$ of an interval of the image forming devices.

Claim 15 (Previously Presented): The optical writing unit as claimed in claim 11, wherein the approximated line of the exposure areas corresponding to the plurality of light emitting devices is obtained from a plurality of the light emitting devices that are located within a range between LK and 3LK, where LK represents an interval of the image forming devices.

Claim 16 (Previously Presented): The optical writing unit as claimed in claim 11, wherein intervals between the light emitting device on the edge of one of the light emitting device array chips and the light emitting device on the edge of an adjacent one of the light emitting device array chips are categorized into a plurality of ranks based on the magnitude of the intervals, and the light volume of each of the light emitting devices is set up according to said ranks.

Claim 17 (Previously Presented): The optical writing unit as claimed in claim 16, wherein the ranks are $P_a < P_L$, $P_L \leq P_a \leq P_H$, and $P_H < P_a$, where P_a represents the interval between the light emitting device on the edge of one of the light emitting device array chips and the light emitting device on the edge of an adjacent one of the light emitting device array chips, and P_L and P_H represent predetermined threshold levels of the interval, where $P_L < P_H$.

Claim 18 (Original): The optical writing unit as claimed in claim 17, wherein the light volume is increased where $P_a > P_H$, and the light volume is decreased where $P_a < P_L$.

Claim 19 (Previously Presented): The optical writing unit as claimed in claim 17, wherein PL is set at 0.9P, and PH is set at 1.1P.

Claim 20 (Original): The optical writing unit as claimed in claim 11, wherein the light emitting devices that are located on and near an edge of the light emitting device array chip are the light emitting devices that correspond to a range of distances between 0.5LK and 1.5LK, where LK represents the interval of the image forming devices.

Claim 21 (Previously Presented): An image forming apparatus for forming an image, comprising:

an exposure unit comprising an image forming device array and a light emitting device array, the light emitting device array comprising a plurality of light emitting device array chips, each of the light emitting device array chips comprising a plurality of light emitting devices arranged at a predetermined interval,

wherein the light volume of each of the light emitting devices is set up such that a gradient of an approximated line of exposure areas corresponding to a plurality of the light emitting devices that are selected based on a predetermined cycle falls within a predetermined range for an effective image domain in its entirety, and

the light volume of each of the light emitting devices on and near the edge of the light emitting device array chip is set up such that said gradient corresponds to an interval between the light emitting device on the edge of one of the light emitting device array chips and the light emitting device on the edge of an adjacent one of the light emitting device array chips.

Claim 22 (Previously Presented): A driving method for driving an optical writing unit comprising an exposure unit, the exposure unit comprising a light emitting device array, the light emitting device array comprising a plurality of light emitting device array chips, each of the light emitting device array chips comprising a plurality of light emitting devices arranged at a predetermined interval, the image forming device array comprising a plurality of image forming devices, the driving method comprising:

setting the light volume of each of the light emitting devices such that a gradient of an approximated line of exposure areas corresponding to a plurality of the light emitting devices that are selected based on a predetermined cycle falls within a predetermined range for an effective image domain in its entirety, and

wherein the light volume of each of the light emitting devices on and near the edge of the light emitting device array chip is set up such that said gradient corresponds to an interval between the light emitting device on the edge of one of the light emitting device array chips and the light emitting device on the edge of an adjacent one of the light emitting device array chips.